Rajani Singh, Ph.D.







Research Interest

Data-Driven Decision-Making, Data Science, Dynamic and Evolutionary Game Theory, Applied Game Theory, Optimal Control Theory, Operations Research

Employment History

$01.02.2022 - \cdots$	Assistant Professor Department of Digitalization, Copenhagen Business School, Denmark
01.12.2019 - 31.01.2022	Postdoctoral Researcher Department of Digitalization, Copenhagen Business School, Denmark
10.06.2019 - 09.09.2019	Full time Visiting Researcher Department of Electrical and Computer Science, University of Waterloo, Ontario, Canada
01.07.2018 - 30.03.2019	Research Associate Department of Mathematics and Computer Science, Brandon University, Manitoba, Canada
15.02.2018 - 15.07.2018	Visiting Research Scholar Institute of Computer Science, Polish Academy of Sciences, Warsaw, Poland
01.07.2015 - 01.09.2015	Guest Faculty Centre for Computer Sciences, Ewing Christian College, University of Allahabad, India
01.01.2014 - 20.09.2014	Subject Matter Expert in Mathematics Evelyn Learning System Pvt. Ltd. New Delhi, India
01.09.2013 - 01.12.2013	Project Fellow Indian Institute of Technology Delhi, India

Education

2014 - 2019	Ph.D. Mathematics Faculty of Mathematics, Informatics and Mechanics, University of Warsaw, Poland
2011 - 2013	M.Sc. Mathematics Department of Mathematics, Indian Institute of Technology Delhi, New Delhi, India
2008 - 2011	B.Sc. Mathematics and Computer Application Ewing Christian College, University of Allahabad, India

Teaching Experience

Spring $2020 - 2025$	Natural Language Processing and Text Analytics 7.5 ECTS (Partially) CBS, Denmark
Autumn 2020 — 2025	Game Theory for Business and Data-driven Decision Making 7.5 ECTS (Completly) CBS, Denmark
Autumn $2023 - 2024$	Big Data Analytics 7.5 ECTS (Partially) CBS, Denmark
01.10.2015 - 29.01.2017	Linear Algebra Tutorials, Faculty of Economic Sciences, University of Warsaw, Poland

Awards and Achievements

2025	Project Funding for AI-pilot project in teaching for developing "CBotS - Mini Tutor Bot for Students", CBS, Denmark
15 - 18.07.2025	Invited Talk "Market share battles in a competitive advertising clutter", $16^{ m th}$ Viennese Conference on Optimal Control and Dynamic Games, Vienna, Austria
21 - 04.2025	Invited Talk "Game Theory for a Green Transition", Indian Institute Of Management–Lucknow (IIM–Lucknow), India
29 - 01.2025	Invited Talk "Sustainable and Secure Renewable Energy Trading System Based on Digital Twin, Blockchain and Game Theory Integration", Department of Computer Science, University of Copenhagen
22 - 09.2023	Invited Talk "Dynamic Games and its Application", DTU Wind and Energy Systems Department, Technical University of Denmark
25 - 03.2023	Invited Speaker "Game Theory for Decision Making", Lucknow Public College of Professional Studies, India
2021	Best Paper Award For the paper "A Decentralized Privacy-preserving Healthcare Blockchain for IoT" in Sensors
24.09.2020	Young Scientist Award Andrzej Malawski Prize for outstanding contribution to the development of mathematical economics link to webpage: https://nagroda_im_malawskiego.uek.krakow.pl/
05 - 08.08.2019	Invited Speaker $6^{ ext{th}}$ International Conference on Continuous Optimization IC-COPT 2019, Technical University of Berlin, Germany
20 - 22.02.2019	Invited Talk Chair of Operations Research, Department of Mathematics and School of Management, Technical University of Munich, Germany
17 – 19.02.2019	Invited Talk Department of Computer Science, Aarhus University, Kingdom of Denmark
23 - 24.01.2019	Travel Support To attend DCGT 2019: 6 th Day on Computational Game Theory, Potsdam, Germany
	Young Researcher Grant To attend Workshop on Advances in Stochastic Games, Budapest, Hungary
15 – 17.12.2018	ITC Conference Grant To attend WINE 2018: The 14 th Conference on Web and Internet Economics, Oxford, U.K.
03 - 06.07.2018	Invited Speaker 14 th Viennese Conference on Optimal Control and Dynamic Games, Vienna, Austria
2017 – 2019	Principal Investigator of the Project "Games dynamic modeling 'tragedy of the common resource" funded from Funds of National Science Centre, Poland, granted by decision number $FEB2016/21/N/HS4/00258$
2015 — 2017	Ph.D Fellowship : Two-time Awardee of the Fellowship for Outstanding Ph.D. students by Warsaw Center of Mathematics and Computer Science (WCMCS)
17 – 18.09.2018	COST scholarship for Training School on Recent Applications of Game Theory, Krakow, Poland
04 - 09.09.2016	Scholarship for summer school on Game Theory and Dynamic games, Lake Como School of Advanced Studies, Campione d'Italia
07 - 11.09.2015	Scholarship for summer school on Game Theory and Algorithms, Lake Como School of Advanced Studies, Campione d'Italia
2008 – 2009	$\bf Merit\ holder\ B.Sc.\ 1^{St}\ year,$ Ewing Christian College, University of Allahabad, India

Academic Services

Editorship

- Associate Editor IS Research Methods, Theories, and Philosophy Track for ICIS 2025 conference
- **Guest editor** International Game Theory Review Journal for the research topic "Strategic Models in Computing Applications"
- **Topic editor** Frontiers in Blockchain Journal for the research topic "Blockchain for United Nations Sustainable Development Goals (SDGs)"
- Guest Editor Sensors Journal for Special Issue on "Data Privacy, Security, and Trust in Blockchain and IoT Networks"

Programme committee for IEEE Conference

- Workshop on Security and Privacy in Intelligent Infrastructures (SP2I) in Conference on Availability, Reliability, and Security (ARES) 2024.
- Special Session: Smart City Data Analytics: Applications and Implications in IEEE International Conference on Data Science and Advanced Analytics (IEEE DSAA) 2023.
- Workshop on Security and Privacy in Intelligent Infrastructures (SP2I) in Conference on Availability, Reliability, and Security (ARES) 2023.

Reviewed for Journals

- Applied Mathematics and Computation
- IEEE Internet of Things
- IEEE Computer Magazine
- Computer Communications
- IEEE Network Magazine
- Sensors
- Applied Sciences
- Algorithms
- Mathematics
- Sustainability
- Electronics
- Computers
- Symmetry
- Energies
- **F**uture Internet
- Journal of Risk and Financial Management
- In the Reviewer Board of the Axioms journal
- **Book Proposal** for CRC Press (Taylor and Francis group)
- **Book Proposal** for Springer Nature (Computer Science)